

**LOWER PASSAIC RIVER STUDY AREA
PRP DATA EXTRACTION FORM**

Alcan Aluminum Site Kearny, New Jersey

CANDIDATE PRP(S):

PRP: Novelis Corporation

CURRENT MAILING ADDRESS/CONTACT INFO FOR CANDIDATE PRP(S):

PRP: Novelis Corporation

3560 Lenox Road, Suite 2000,
Atlanta, GA 30326
(G-ALC000132 at G-ALC000133)

The United States Environmental Protection Agency (EPA) issued a General Notice Letter to Alcan Aluminum Corporation on March 26, 1996, notifying Alcan Aluminum Corporation of its potential liability relating to the contamination of the Passaic River Study Area (G-ALC000525). A second General Notice Letter, dated September 15, 2003, was subsequently issued by EPA to Alcan Aluminum Corporation for the extended 17-mile Lower Passaic River Study Area (G-ALC000530 at G-ALC000531). The second General Notice Letter was reissued to Alcan Aluminum Corporation via letter dated September 25, 2003, in order to reflect a change in the president of Alcan Aluminum Corporation from Robert Ball to Brian Sturgell (G-ALC000538).

FACILITY ADDRESS:

The street address of the former Alcan Aluminum Corporation (“Alcan Site” or “the Site”) is:

1 Jacobus Avenue, Kearny, New Jersey 07032

Alcan Aluminum Corporation and its predecessors historically leased and operated in certain buildings located in the Tomkins Tidewater Terminal, a multi-tenant complex located on Jacobus Avenue in Kearny, NJ, and waterfront to the Passaic River (G-ALC000123, G-ALC000506 at G-ALC000509). The larger Tomkins Tidewater complex encompasses approximately 22 acres and is bounded by the Passaic River on the west, the Pulaski Skyway on the north, Jacobus Avenue on the east, and Route 1 & 9 on the south (BBC000002 at p. 4).

The property and buildings of the former Tomkins Terminal complex were acquired and are now part of the larger River Terminal Development Corporation (River Terminal Development) warehouse and multi-tenant distribution facilities located in the south Kearny area (G-

ALC000541 at G-ALC000543, G-ALC000547). The former buildings of the Tompkins Terminal complex, (including the former buildings that housed Alcan Aluminum), were replaced with new buildings constructed in the River Terminal Development south Kearny facilities, in part as of 2002 (G-ALC000547, G-ALC000549 and G-ALC000551). The new River Terminal Development buildings that are located within the footprint of the former Tompkins Terminal complex bear the addresses of One Jacobus Avenue, 3 Logistics Drive and 5 Logistics Drive, Kearny, NJ (G-ALC000547, G-ALC000551).

The relative location of the Alcan Aluminum Site within the LPRSA is provided for review in Figure number 1, Alcan Aluminum Site Location. Note that the figure depicts the outline of the area which previously housed the Alcan Aluminum operations in the former Tompkins Terminal Complex superimposed on the image of the new, recently built buildings in the River Terminal Development's Kearny warehouse and multi-tenant facilities.

FINANCIAL VIABILITY (annual revenue, # of employees):

Alcan Aluminum Corporation, (under the original name of Alroll, Inc.), was incorporated in the State of New York on October 28, 1960 (AAD000074).

On July 30, 1985, Alcan Aluminum Corporation was merged into Alcan Properties, Inc. (Alcan Properties); with Alcan Properties, an Ohio corporation, being the surviving entity resulting from the merger (AAD000048 at AAD000073, AAD000074 at AAD000075). As of the 1985 merger, the name of Alcan Properties was then amended and changed to Alcan Aluminum Corporation, now an Ohio corporation (AAD000074 at AAD000074-75).

On July 30, 2003, Alcan Aluminum Corporation was merged with and into Alcan Corporation, with Alcan Corporation (Alcan) being the surviving entity of the merger (G-ALC000452 at G-ALC000454).

On December 22, 2004, Alcan's shareholders approved a proposed spin-off of its rolled products businesses into an independent company named Novelis Inc. (G-ALC000405). The spin-off occurred on January 6, 2005, with Alcan shareholders receiving one Novelis common share for every five Alcan common shares held. On that same date, common shares of Novelis began trading on the Toronto and New York stock exchanges (G-ALC000407 at G-ALC000415).

In 2007, Novelis was acquired by Hindalco Industries Limited (Hindalco Industries). Hindalco Industries is a company in the Aditya Birla Group of companies, a multinational conglomerate headquartered in Mumbai, India. Following the merger, Novelis became a wholly owned subsidiary of Aditya Birla Group (G-ALC000367).

Novelis reported in 2016 that it has a workforce of 11,970 employees worldwide with 3,430 employees located in North America. Novelis reported consolidated sales of \$9,872 Million for the fiscal year ending March 31, 2016 (G-ALC000132 at G-ALC000146, G-ALC000132 at G-ALC000160). For the fiscal year ending March 31, 2017, Novelis reported full year net income of \$233 Million with reported revenues of \$9.6 Billion (G-ALC000368 at G-ALC000374-375).

DATES OF OPERATION (include info. on predecessors/successors if known):

Site Operators:

The beginning of the tenure of Alcan and its predecessors at the Kearny Site is not presently known. However, early patent applications filed separately in 1953 and 1954 do note that the patents were assigned at that time to “Brixite Manufacturing Co., Inc., South Kearny, N. J.” (G-ALC000513, G-ALC000514). However, Alcan stated that the tenure of its predecessor, Brixite Manufacturing Co., Inc., started at the site as of 1956 (G-ALC000506 at G-ALC000509).

A 1965 federal court opinion from a litigation matter¹ involving Alcan Aluminum Corporation stated Brixite Manufacturing was acquired in 1964 and became part of the Bridgeport Brass Metals division (Bridgeport) of National Distillers & Chemical Corporation (G-ALC000060 at G-ALC000061). It was stated in the court opinion that “Bridgeport fabricates aluminum awning components and siding which it markets under the Wall Master brand through the Brixite Manufacturing Company” (ALC000060 at G-ALC000061).

Alcan Aluminum Corporation completed the purchase of Wallmaster and Brixite in 1965 from National Distillers (G-ALC000060 at G-ALC000061, G-ALC000107 at G-ALC000108). Alcan Aluminum Corporation renamed Wallmaster as the “Brixite Division” of Alcan Aluminum Corporation (G-ALC000107 at G-ALC000108).

Brixite Manufacturing Co. Inc. is listed in a 1964 industrial directory as being in operation on Jacobus Avenue, Kearny (G-ALC000059). As of a 1969 industrial directory, both Brixite and Wallmaster Aluminum Company are listed on Jacobus Avenue (G-ALC000065). Alcan Aluminum Corporation was subsequently listed on Jacobus Avenue as of a 1970 historical industrial directory (G-ALC000078 at G-ALC000079-80). However, both Brixite and Wallmaster Aluminum Company are again listed as of a 1971 industrial directory (G-ALC000101 at G-ALC000102).

Alcan Aluminum Corporation continued to operate at the Site until the end of 1975, when it reported to the Passaic Valley Sewerage Commissioners, (PVSC) that it’s Kearny, NJ, operations would be discontinued and closed as of December 5, 1975 (G-ALC000112).

Site Owners:

During their tenure at the Kearny Site, Alcan and its predecessors are indicated as having leased certain buildings in the Tomkins Tidewater Terminal, a multi-tenant complex waterfront to the Passaic River (G-ALC000123, G-ALC000506 at G-ALC000509).

¹ United States v. Aluminum Limited, Alcan Aluminum Corporation, and National Distillers & Chemical Corp., (U. S. District Court NJ, 1965), was brought by the federal government out of anti-trust concerns centering on Alcan Aluminum, (and it’s Canadian parent, Aluminum, Ltd.), proposed acquisition of the Aluminum Division of National Distillers & Chemical Corporation (G-ALC000060 at G-ALC000060-61). Of note, the case was ultimately decided in the favor of Alcan Aluminum and the defendants and allowed for the companies’ acquisition of the Aluminum Division from National Distillers & Chemical Corporation (G-ALC000060 at G-ALC000060-64).

The Tidewater Terminal was reported as having been constructed in the 1920s time period (G-ALC000123). In 1981, the 22-acre terminal property was reportedly sold by one Sam Tuttle, an individual, to Miller Construction Company, based in Jersey City, NJ (G-ALC000123).

As of 1997, 25 to 35 tenants occupied the approximately sixteen buildings on the site. Tenant property use included warehousing, bulk freight, and distribution of textiles and food products (BBC000002 at p. 4).

Both Tomkins Renewal Associated T/A Tomkins Tidewater Terminal of Jersey City, New Jersey and Miller Construction Company were indicated as former property owners with an address listed at 921 Bergen Avenue, Jersey City (BBC000035, pg. 5, 9; BBC000003 at p. 1). Tomkins Tidewater was apparently the owner in April 1996 (BBC000002 at p. 6).

As of 2001, the site was owned by River Terminal Development Company and had been since at least July 2000 (BBC000001 at p.4; BBC000032 at p. 2).

DESCRIPTION OF FACILITY OPERATIONS (list CERCLA hazardous substances used, manufactured or present):

A Canadian trademark filed in 1959 for Brixite Manufacturing Co., Inc., notes the company manufactured insulating sidings made of impregnated fibrous material and sold in the form of boards or sheets (G-ALC000520 at G-ALC000522). In a patent filed in 1958 and assigned to Brixite Manufacturing, it was stated that certain heavy panels produced by the company and used for building siding purposes generally consisted of a fiberboard base material that is coated in asphalt or other waterproof coating. The boards were noted as being further impregnated with asphalt and surfaced with mineral granules or grit material (G-ALC000515 at G-ALC000517). An undated document from the Kearny Fire Department notes that the Brixite operation included the use of asphalt dip tanks, hot asphalt, dust collectors and baled fiberboard materials (G-ALC000001 at G-ALC000002).

As of a 1970 industrial directory publication, Alcan was listed as manufacturing “aluminum and other building products” at the Kearny Site (G-ALC000078 at G-ALC000079-80).

A 1971 city directory for Kearny, NJ, lists both Alcan Aluminum and Wallmaster Aluminum Co. under the heading of “Aluminum Mfrs”, while Brixite Manufacturing Co., Inc., is listed in the 1971 directory under the heading of “Building Materials and Supplies” (G-ALC000553 at G-ALC000554-555). Wallmaster Aluminum Co. and Brixite Manufacturing Co., Inc., are recorded separately in a list of companies operating on Jacobus Avenue in the 1971 directory, however, the two companies are shown in the list as having the same telephone contact information. Alcan Aluminum is not shown in the list (G-ALC000553 at G-ALC000556).

According to an Industrial Surface Coating Questionnaire completed by Alcan on December 22, 1975 (after the facility ceased operation), Alcan reported that in 1974 the Site produced 52,000,000 lbs. of “aluminum siding, roofing, and accessories” using 35,600 gallons per year of solvents/thinners (NOV0000207 at NOV0000213–214).

The survey reports that 158,000 gallons per year of synthetic baking enamel were used onsite (NOV0000207 at NOV0000213). Alcan reports that coating materials consisted of materials such as ketones, aromatics, alcohol, aliphatic hydrocarbons, cellosolve acetate, and butyl alcohol (NOV0000207 at NOV0000213). Alcan reports that these aforementioned coating materials were supplied by Sherwin Williams and Celanese (NOV0000207 at NOV0000213).

Waste products:

Alcan's onsite operations consisted of an aluminum coating line that produced a "spent chromate pretreatment waste," in addition to empty paint drums (NOV0000085 at NOV0000086). According to Alcan's 104(e) Responses to USEPA, they are unable to determine information relative to characteristics of the waste or the volume of waste produced. According to the response they do not believe the paint and chromate wastes were combined (NOV0000085 at NOV0000086). The waste paint drums were returned to the vendors and the waste chromate was shipped off site (NOV0000085 at NOV0000086).

Site Sewers and Discharge Routes:

According to the November 1969 "Report on the Quality of Interstate Waters of the Lower Passaic River and Upper and Lower Bays of New York Harbor," the Site is noted to have a 4-inch, 2-inch, and "several other" 3-inch pipes discharge from the Site into the Passaic River (NOV0000066 at NOV0000067). Wastewaters discharging through these pipes consisted of chromium at 122 parts per million ("ppm") and cyanide at 70 ppm (NOV0000066 at NOV0000067).

Further, according to the November 1969 Conference regarding Pollution of the Interstate Waters of the Hudson River and its Tributaries, the Site has five outlets discharging to the Passaic River, four of which "contain cooling water on machines to cool aluminum strips". The fifth outlet was reported to be an emergency overflow if the industrial pump failed (KLL029706 at KLL030030-30031). Plating waste from onsite operations was discharged into a sump well, overflow from which discharged to the Passaic River (NOV0000141 at NOV0000148). This sump was used as an "emergency" overflow to the Passaic River if the sump failed. It was sealed on October 3, 1969 (NOV0000141 at NOV0000148-149; KLL029706 at KLL030030-30031).

Site surface water drainage occurs via a network of storm sewers which discharge directly to the Passaic River immediately west of the site. The site is subject to flooding during precipitation events. Extremely shallow groundwater on the site (a few inches below grade) is tidally influenced, suggesting that it is "connected hydraulically to the river, with a net flow toward the river" (BBC000002 at p. 5; BBC000033 p. 11).

Eleven underground storage tanks (USTs) were removed at the site in April 1996. During removal of the USTs, most were observed to have been pitted and corroded. Petroleum staining, odor, and some free-phase product were also observed. A total volume of 17,075 gallons of residual liquid was removed from the USTs at the time of closure. During the remedial action for soil contamination around these tanks, another two tanks were discovered. The 13 USTs had

contained: Fuel oil (4 USTs); gasoline (7); diesel (1); and waste oil (1) (BBC000035 pg. 9; BBC000002 at pp. 6, 17).

The Whitman Companies, Inc. (“Whitman”) performed a baseline ecological evaluation in June 1999 and concluded that the constituents present in site ground water at that time (benzene, MTBE) did not represent potential threats to nearby surface water quality and were not of ecological concern (BBC000033 at pp. 3-4).

Enforcement Action:

A Phase I Environmental Site Assessment was conducted by Whitman in October 1995 (BBC000035 at pg. 10). Seven permitted UST removals were performed by PDM Environmental Services, Inc. in April 1996 with an additional four tanks discovered and closed at the time. The four additional tanks were registered at the time of removal (BBC000035 at pp. 10–11). The leaks from the USTs, discovered during their removal, were reported to the New Jersey Department of Environmental Protection (“NJDEP”) in April 1996 and assigned case number 96-4-22-1522-31 (BBC000002 at p. 6). Keating Environmental performed the remedial investigation following closure of the USTs and issued a Remedial Investigation report in August 1997. Remedial Action reports showing excavation of contaminated soils and monitoring of ground water were submitted by Whitman from 1998 through 2000. A Remedial Action Workplan for ground water was submitted to NJDEP in February 2001 which recommended utilization of enhanced bioremediation.

In a letter dated November 22, 2000, NJDEP required Miller Construction to perform a baseline ecological evaluation for each area of concern where soil contamination formerly existed. NJDEP overruled the earlier June 1999 conclusion by Whitman that gasoline constituents were not an ecological concern (BBC000003 p. 3).

SOIL SAMPLING AND CONTAMINATION:

Materials detected in Site soils include the following:

Dioxin

No information available at this time.

Dioxin-Associated Compounds

No information available at this time.

PCBs

Compound	Reported Result		Reference
	ppm	ppb	
Total PCBs	0.32		BBC000002 at p. 21

Pesticides / Herbicides

No information available at this time.

Metals

Compound	Reported Result		Reference
	ppm	ppb	
Antimony	8.84		BBC000002 at p. 21
Arsenic	42.8		BBC000002 at p. 21
Beryllium	0.622		BBC000002 at p. 21
Cadmium	23.8		BBC000002 at p. 21
Chromium	30.1		BBC000035 at p. 16
Copper	133		BBC000002 at p. 21
Lead	280		BBC000002 at p. 21
Mercury	0.55		BBC000035 at p. 16
Nickel	32.6		BBC000002 at p. 21
Zinc	2,060		BBC000002 at p. 21

Volatile Organic Compounds

Compound	Reported Result		Reference
	ppm	ppb	
Ethylbenzene	2,248		BBC000002 at p. 9
Methylene Chloride	0.024		BBC000002 at p. 21
Toluene		4.2	BBC000033 at p. 21
Xylene		42.2	BBC000033 at p. 21

Semi-Volatile Organic Compounds

Compound	Reported Result		Reference
	ppm	ppb	
Benzo(a)anthracene	282		BBC000002 at p. 27
Chrysene	312		BBC000002 at p. 27

GROUNDWATER SAMPLING AND CONTAMINATION:

Contaminants detected in Site groundwater include the following:

Volatile Organic Compounds

Compound	Reported Result		Reference
	ppm	ppb	
Benzene		25.1	BBC000001 at p. 8
Methyl tert-butyl ether (MTBE)		8,300	BBC000033 at p. 24

Compound	Reported Result		Reference
	ppm	ppb	
Tentatively-identified compounds (TICs)		1,554	BBC000001 at p. 8

ON-SITE SEDIMENT SAMPLING AND CONTAMINATION:

No information available at this time.

OFF-SITE SEDIMENT SAMPLING AND CONTAMINATION:

Numerous off-site sediment samples were historically collected in the Passaic River. For the purposes of this summary of evidence on Alcan Aluminum, the following sediment sample, located adjacent to the area of the Alcan Aluminum Site and Tomkins Terminal, were evaluated to determine the type of contamination present in this area of the Passaic River.

1. Core # 92A - Core # 92A is located along the center of the Passaic River, approximately 225 feet west of the waterfront of the Tomkins Terminal complex and to the immediate north/northwest of the former area of the Alcan Aluminum Site. Core # 92A is identified as having been collected during Sample Event No. 02 of the Core Sediment Investigation of July 1993.

At depth, the river sediment in the area of the Site, as sampled in Core # 92A, is contaminated with metals, volatile organic compounds and other compounds that match contaminants found in historical sampling of the on-site media of the Alcan Aluminum Site. These matching contaminants that are identified in the sediments sampled in Core # 92A include, but are not limited to cadmium, chromium, lead, mercury, nickel, zinc, benzene, toluene and chrysene (NOV0000141 at NOV0000142).

The location of the Alcan Aluminum Site relative to certain sediment samples in the LPRSA, including Passaic River sediment sample Core # 92A is provided for review in Figure number 2, Sediment Sample Locations Near the Alcan Aluminum Site. Note that the figure depicts the outline of the area which previously housed the Alcan Aluminum operations in the former Tomkins Terminal Complex superimposed on the image of the new, recently built buildings in the River Terminal Development's Kearny warehouse and multi-tenant facilities.

Also provided for review with this summary of evidence is Table number 1, Alcan Aluminum Site - Nexus To Lower Passaic River Study Area Sediment Contamination. The table provides an overview of the nexus existing between the Alcan Aluminum Site and the Lower Passaic River, including: (1) certain compounds associated with the Alcan Aluminum Site and the concentrations where these compounds have been identified from sampling of site soils or groundwater; (2) which contaminants are documented as present in the facility's wastewater discharge; and (3) the extent of sediment contamination associated with these compounds, specifically, the highest concentrations of these contaminants that are found at depth in the Core # 92A sediment sample.

PERMITS (provide dates):

USEPA

Alcan was issued National Pollutant Elimination System Discharge (NPDES) Permit Number 2SD OXW2 000 699 (NOV0000175 at NOV0000177).

According to Alcan's 104(e) Response to USEPA, the company has no records of permits issued pursuant to the Federal Water Pollution Control Act with respect to the Site (NOV0000085 at NOV0000085).

NEXUS TO THE PASSAIC RIVER (describe in detail; cite to supporting documentation; date or time period of disposal; list CERCLA hazardous substances; and volume, if known):

Direct (e.g. pipe, outfall, spill):

On October 3, 1969 the State of New Jersey Department of Health issued a Cease and Desist Order to Alcan relative to the "discharge of industrial waste and other polluting matter" into the Passaic River (NOV0000063 at NOV0000064; NOV0000141 at NOV0000142). According to a New Jersey Department of Health letter dated March 26, 1970, a sump well failed causing plating wastes to drain from the overflow drain pipe to the Passaic River. The drain pipe was reportedly sealed and overflow would be directed to the floor instead of the Passaic River (NOV0000141 at NOV0000148). During a reported March 25, 1970, inspection of the Alcan facilities by the State of New Jersey Department of Health (NJDOH), it was stated that: "The company has plugged this drain pipe so that any pump failure will flood the floor rather than drain to the river" (NOV0000141 at NOV0000148).

Under the Order, Alcan was directed to "install and provide wastewater treatment and/or disposal facilities" in order to adequately treat and dispose of wastewater from the Site (NOV0000063 at NOV0000064).

According to the November 1969 "Report on the Quality of Interstate Waters of the Lower Passaic River and Upper and Lower Bays of New York Harbor," the Site was noted to have a 4-inch, 2-inch, and "several other" 3-inch pipes discharge from the Site into the Passaic River (NOV0000066 at NOV0000067). Contaminants in the wastewaters discharging to the Passaic River through these pipes consisted of:

- Chromium at 122 ppm
- Cyanide at 70 ppm

(NOV0000066 at NOV0000067).

Further data relative to the discharges from these aforementioned pipes includes the following:

Pipe Size	Est. Flow. (mgd)	Temp.	BOD (mg/l)	TSS	pH	Total Coliform	Fecal Coliform
4"	0.1	42	2	42	7.7	10	4
2"	0.2	44	7.4	60	7.6	10	4

(NOV0000066 at NOV0000067).

In November 1995, USEPA issued a second 104(e) Request to Alcan seeking additional information specifically relative to the October 1969 Cease and Desist Order, as well as information pertaining to analysis of waste material generated onsite (NOV0000121 at NOV0000121-126). Alcan responded that “no records exist for the facility in question” (NOV0000127 at NOV0000127-128).

As noted above, Passaic River sediment sample Core # 92A, which is located approximately 225 feet west of the former Tomkins Terminal Complex and the area of the Alcan Aluminum Site, has been found to contain hazardous substances which match the building products manufacturing and metal working operations that were conducted at the Alcan Aluminum facility. An evaluation of Core # 92A identifies that contamination present at depth in the sediments sampled in this core match metals, volatile organic compounds and other contaminants identified in on-site soils and groundwater at the Alcan Aluminum Site.

Table number 1 provides an overview of the nexus between the Alcan Aluminum Site and sediment contamination present in the Passaic River adjacent to the Site. As noted above, Table number 1 provides details on concentrations of contaminants found in site soils and groundwater, and/or in facility discharges, which match contaminants found in the river sediments adjacent to the Alcan Aluminum Site.

Sanitary Sewer:

No information available at this time.

Storm Sewer:

No information available at this time.

Runoff:

The Site has a tendency to flood during heavy precipitation events and/or storms which increases the likelihood that surface runoff may carry soil contaminants to the Passaic River (BBC000002 at p. 5).

Groundwater:

No information available at this time.

POTENTIAL NEXUS TO THE PASSAIC RIVER (describe in detail; cite to supporting documentation; list CERCLA hazardous substances; and volume, if known):

Direct (e.g. pipe, outfall, spill):

No information available at this time.

Sanitary Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

No information available at this time.

Runoff and Storm Sewers:

No information available at this time.

Groundwater:

No additional information is available at this time.

REFERENCES

BATES NO.	DATE	DESCRIPTION
AAD000048	1985/07/30	Amended Articles of Incorporation of Alcan Aluminum Corporation
AAD000074	1985/07/31	Agreement and Plan of Merger between Alcan Aluminum Corporation and Alcan Properties, Inc.
KLL029706	1969/11/25	Proceedings of the Conference in the Matter of Pollution of the Interstate Waters of the Hudson River and Its Tributaries- New York—New Jersey, sponsored by the US Department of the Interior and Federal Water Pollution Control Administration
BBC000001	2001/02/02	“Remedial Action Workplan: ORC Injection” by the Whitman Companies, Inc.
BBC000002	1997/08/00	“Underground Storage Tank Closure, Remedial Investigation/Remedial Action Report, Tompkins Tidewater Terminal, South Kearny, NJ,” by Keating Environmental Management Inc.
BBC000003	2000/11/22	Letter from NJDEP to Miller Construction Co. Including Comments on the Remedial Investigation Workplan dated September 19, 2000.
BBC000032	2000/07/25	“Progress Report #2: Tomkins Tidewater Terminal” by the Whitman Companies, Inc.
BBC000033	1999/08/24	“Soils Remedial Action Report and Groundwater Remedial Action Workplan” by the Whitman Companies, Inc.
BBC000035	1998/10/12	Letter from The Whitman Companies, Inc. to NJDEP transmitting Remedial Investigation Report for the Tompkins Tidewater Terminal Facility
G-ALC000001	Undated.	Copy of letter from Factory Mutual Insurance Co. to Tomkins Tide Water Terminal with fire prevention recommendations
G-ALC000059	1964/00/00	Page 1009 of Kearny-Harrison street directory, Ivy (cont’d) to Jauncey Ave

BATES NO.	DATE	DESCRIPTION
G-ALC000060	1965/01/05	United States v. Aluminum Limited, Alcan Aluminum Corporation, and National Distillers & Chemical Corp., United States District Court for the Court of New Jersey
G-ALC000065	1969/00/00	The Price & Lee Co's street directory, Ivy (cont'd) to Jefferson Ave
G-ALC000078	1970/00/00	1970 New Jersey State Industrial Directory
G-ALC000101	1971/00/00	Kearny City Directory, Including Harrison, North Arlington, East Newark
G-ALC000107	1971/06/01	Waldman et al v. Alcan Aluminum Corporation, Superior Court of New Jersey Appellate Division
G-ALC000112	1975/12/01	Letter from Alcan Aluminum Corporation to Passaic Valley Sewerage Commissioners, notifying of the closure of the South Kearny Plant
G-ALC000123	1981	Partially dated newspaper article from Jersey Journal entitled <u>South Kearny Terminal Purchased</u> .
G-ALC000132	2016/05/10	Form 10-K Novelis Inc., Annual Report for the fiscal year ended March 31, 2016
G-ALC000367	Undated	Website printout of "Our History" from Novelis webpage.
G-ALC000368	2017/05/10	Form 8-K Novelis Inc., containing financial information for the fiscal year ended March 31, 2017
G-ALC000405	2004/12/22	Novelis Press Release: "Alcan shareholders approve Novelis spin-off"
G-ALC000407	2005/05/06	Form 10-Q, Novelis Inc., financial results for the quarter ended March 31, 2005
G-ALC000452	2003/07/30	Documentation related to Alcan Corporation merger filed with the Ohio Secretary of State
G-ALC000506	2010/01/28	NJDEP and Administrator of the NJ Spill Compensation Fund v. Occidental Chemical Corporation et al, Superior Court of New Jersey

BATES NO.	DATE	DESCRIPTION
G-ALC000513	1957/04/09	United State Patent #180,051 for a Building Side Panel, assigned by William Waldman to Brixite Manufacturing Co.
G-ALC000515	1961/07/04	Patent number 2,990,651. Entitled <u>Overlap Shake Siding</u> .
G-ALC000520	1960/08/05	Registration of Canadian trademark for Brixite,#0253941, expunged 1990/09/28
G-ALC000525	1996/04/26	General Notice Letter from USEPA to Alcan Aluminum Corporation re: Diamond Alkali Site, potential liability
G-ALC000530	2003/09/15	General Notice Letter, follow-up, from USEPA to Alcan Aluminum Corporation re: Diamond Alkali Site, potential liability
G-ALC000538	2003/09/25	General Notice Letter, follow-up, from USEPA to Alcan Aluminum Corporation re: Diamond Alkali Site, potential liability
G-ALC000541	Undated	Website printout from www.riverterminal.com . About RTD and other information from website.
G-ALC000547	2014/09/00	Site plan. Maps showing complex of the River Terminal Development warehousing and multi-tenant facilities in south Kearny.
G-ALC000549	Undated	Website printout of real estate prospectus for lease property at Building 50, One Jacobus Avenue, Kearny, NJ.
G-ALC000551	Undated	Website printout of real estate prospectus from River Terminal Development for lease property at One Jacobus Avenue, Kearny, NJ.
G-ALC000553	1971/00/00	Excerpts from Kearny City Directory dated 1971.
NOV0000063	1968/10/03	Order from NJ Department of Health to Alcan Aluminum Corporation
NOV0000066	1969/11/00	U.S. Department of the Interior Report on the Quality of the interstate Waters of the Lower Passaic River and Upper and Lower Bays of New York Harbor

BATES NO.	DATE	DESCRIPTION
NOV0000085	1995/03/02	Alcan Aluminum Corporation Response to Request for Information Regarding the Diamond Alkali Superfund Site, Passaic River Study Area
NOV0000121	1995/11/17	USEPA Second Request for Information to Alcan Aluminum Corporation Regarding the Diamond Alkali Superfund Site
NOV0000127	1995/12/20	Alcan Aluminum Corporation Response to USEPA's Second Request for Information Regarding the Diamond Alkali Superfund Site
NOV0000141	2003/10/30	Faxed Compilation of Information Regarding Discharges from the Alcan Aluminum Site
NOV0000175	1976/02/27	Discharge Monitoring Report for the Alcan Aluminum Facility ca. November 1975
NOV0000207	1975/11/12	USEPA Survey Submitted to Alcan Regarding Air Pollution Control

TABLE # 1
ALCAN ALUMINUM SITE
NEXUS TO LOWER PASSAIC RIVER STUDY AREA SEDIMENT CONTAMINATION

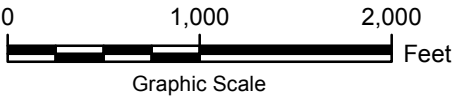
Detected in Analytical Results from On-Site Sampling Events			Documented Discharge To LPRSA	LPRSA Sediment Sample	
Compound	Soil	Groundwater		No. 92A	Reference
Metals:					
Antimony	8.84 ppm	NF	NS	13.4 ppm	BBC000002 at p. 21
Arsenic	42.8 ppm	NF	NS	12.4 ppm	BBC000002 at p. 21
Beryllium	0.622 ppm	NF	NS	1.1 ppm	BBC000002 at p. 21
Cadmium	23.8 ppm	NF	NS	14.5 ppm	BBC000002 at p. 21
Chromium	30.1 ppm	NF	122 ppm	390 ppm	BBC000035 at p. 16, NOV0000066 at NOV0000067
Cyanide	NF	NF	70 ppm	NF	NOV0000066 at NOV0000067
Copper	133 ppm	NF	NS	360 ppm	BBC000002 at p. 21
Lead	280 ppm	NF	NS	626 ppm	BBC000002 at p. 21
Mercury	0.55 ppm	NF	NS	4.9 ppm	BBC000035 at p. 16
Nickel	32.6 ppm	NF	NS	143 ppm	BBC000002 at p. 21
Zinc	2,020 ppm	NF	NS	1,420 ppm	BBC000033 at p. 6
PCBs:					
Total PCBs	0.32 ppm	NF	NS	2,900 ppb	BBC000002 at p. 21
Volatile Organic Compounds:					
Benzene	NF	25.1 ppb	NS	29 ppb	BBC000001 at p. 8
Ethylbenzene	2,248 ppm	73.7 ppb	NS	29 ppb	BBC000002 at p. 9, BBC000033 at p. 21
Methyl tert-butyl ether (MTBE)	NF	8,300 ppb	NS	NS	BBC000033 at p. 24
Methylene Chloride	0.024 ppm	0.095 ppm	NS	29 ppb	BBC000002 at p. 21 BBC000002 at p. 26
Tentatively-identified compounds (TICs)	NF	1,554 ppb	NS	-	BBC000001 at p. 8
Toluene	0.15 ppm	4.2 ppb	NS	29 ppb	BBC000033 at p. 21 BBC000002 at p. 25
Xylene	634 ppm	42.4 ppb	NS	120 ppb	BBC000033 at p. 21, BBC000032 at p. 8
Semi-Volatile Organic Compounds:					
Benzo(a)anthracene	282 ppm	NF	NS	7,800 ppb	BBC000002 at p. 27
Chrysene	312 ppm	NF	NS	7,800 ppb	BBC000002 at p. 27

- NOTES:**
- ND = Not Detected.
 - NF = Data Not Found / Data Not Available (in documents obtained to-date).
 - NS = Not Sampled.



- Legend:**
- River Mile
 - Municipal Boundary
 - Shoreline (Approximate)
 - Alcan Aluminum Site Boundary

- Notes:**
- Aerial images collected in 2015 obtained from the New Jersey Geographic Information Network.
 - Inset map is not to scale.



**Figure:
1**

**Alcan Aluminum
Site Location**

Glenn Springs Holdings, Inc.
Lower Passaic River Study Area
Evidence Summary Package

Data Location: Syracuse Created By: rardiff Modified By: mturnquist
G:\GIS\GlennSpringsHoldings\NewJerseyHarborEstuary\Passaic\Alcan\Aluminum\ESP\mxd\Sediment Sample Locations Map - Alcan Aluminum_v2.mxd 5/12/2017 2:23:57 PM

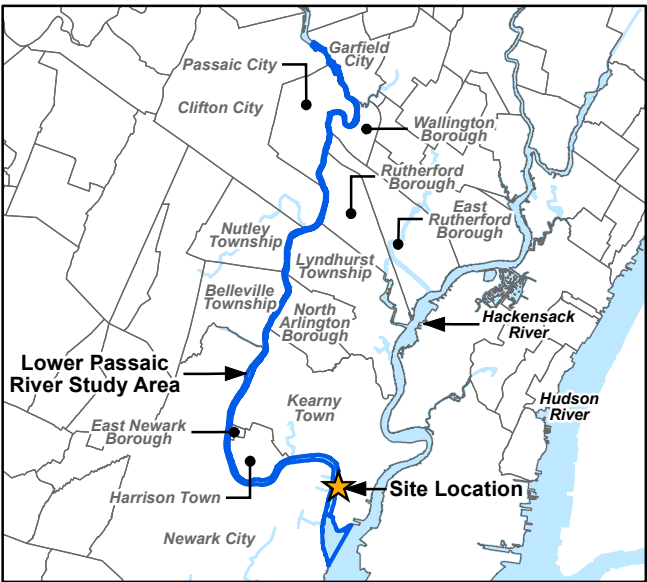
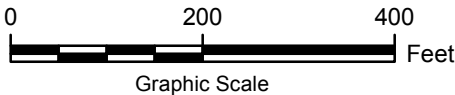


Legend:

- Stormwater Outfall (SWO)
- Subsurface Samples Collected at Location
- Surface Samples Collected at Location
- Surface and Subsurface Samples Collected at Location
- River Mile
- Municipal Boundary
- Shoreline (Approximate)
- Alcan Aluminum Site Boundary

Notes:

- Aerial images collected in 2015 obtained from the New Jersey Geographic Information Network.
- Inset maps are not to scale.



**Figure:
2**

**Sediment Sample Locations Near the
Alcan Aluminum Site**

Glenn Springs Holdings, Inc.
Lower Passaic River Study Area
Evidence Summary Package